

**PATENT APPLICATION**  
**DOCKET NO.: Legare - PAUS0004**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of

Joseph E. Legare

Application No: **TBD**

Group Art Unit: 3748

Filed: September 9, 2003

Examiner: Diem Tran

For: **CONTROL METHODS FOR IMPROVED CATALYTIC CONVERTER EFFICIENCY  
AND DIAGNOSIS**

**INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97 AND 1.98**

Commissioner of Patents  
Washington, D.C. 20231

Sir:


In accordance with 37 C.F.R. §§ 1.97 and 1.98, Applicants hereby discloses to the Office the items identified in this Information Disclosure Statement (IDS). The items are listed on the attached form PTO-1449. Copies of USPN 5,675,967; 5,715,676; 6,148,808; and 6,202,406 are included herewith. Copies of the other cited references may be found in parent application serial no. 09/722,273.

The items identified in this IDS may or may not be “material” pursuant to 37 C.F.R. § 1.56. The submission thereof by Applicants is not to be construed as an admission that any such patent, publication, or other information referred to therein is material or considered to be material (see 37 C.F.R. § 1.97(h)) or qualifies as “prior art” under 37 C.F.R. § 102 with respect to the invention, unless specifically designated by the Applicants as such.

**Information Disclosure Statement under 37 CFR 1.97 and 1.98**

This IDS is believed to be properly filed under 37 C.F.R. § 1.97 (b)(1) because this IDS is filed with the application and before a first office action. Thus, Applicants believes no fee is required. However, if the Office disagrees, then it is requested that the Office consider this IDS as filed under 37 C.F.R. § 1.97(c) and notify the undersigned of the fee being due under 37 C.F.R. § 1.17(p).

Respectfully submitted,

  
\_\_\_\_\_  
Kevin Alan Wolff  
Reg. No. 42,233

Wolff Law Offices  
2111 Eisenhower Ave.  
Suite 404  
Alexandria, VA 22314  
Phone: 703-535-6790  
Fax: 703-535-6791

Date: September 9, 2003

<b>37 CFR 1.501</b> <b>INFORMATION DISCLOSURE CITATION</b> <b>IN A PATENT</b> (Use several sheets if necessary)				Docket Number (Optional) Legare-PAUS0004		Patent Number: TBD	
				Applicant: Joseph E. Legare			
				Issue Date		Group Art Unit: 3748	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,657,625	August 19, 1997	Koga et al.				
	5,974,793	November 2, 1999	Kinugasa et al.				
	5,414,994	May 16, 1995	Cullen et al.				
	5,428,956	July 4, 1995	Maus et al.				
	5,626,014	May 6, 1997	Hepburn et al.				
	5,983,627	November 16, 1999	Asik et al.				
	5,974,790	November 2, 1999	Adamczyk et al.				
	5,945,597	August 31, 1999	Poublon et al.				
	5,211,011	May 18, 1993	Nishikawa et al.				
	5,357,928	October 25, 1994	Ohtsuka				
	5,649,420	July 22, 1997	Mukaihira et al.				
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	Se H. Oh, "Thermal Response of Monolithic Catalytic Converters During Sustained Engine Misfiring: A Computational Study", SAE, 1988.						
	Clifford D. Tyree. "Emission Levels and Catalyst Temperatures as a Function of Ignition-Induced Misfire", U.S. Environmental Protection Agency						
	T. Ma, N. Collings, T. Hands, "Exhaust Gas Ignition (EGI) - A New Concept for Rapid Light-Off of Automotive Exhaust Catalyst"						
	Wei Cai and Nick Collings, "A Catalytic Oxidation Sensor for the On Board Detection of Misfire and Catalyst Efficiency"						
	Collings, Cai, Ma, and Ball, "A Linear Catalyst Temperature Sensor for Exhaust Gas Ignition (EGI) and On Board Diagnostics of Misfire and Catalyst Efficiency"						
	O'Sullivan and Will, "The Effect of Intermittent Engine Misfire and Air to Fuel Ratio Excursion on Exhaust Catalyst Temperature"						
EXAMINER				DATE CONSIDERED			

<b>37 CFR 1.501</b> <b>INFORMATION DISCLOSURE CITATION</b> <b>IN A PATENT</b> (Use several sheets if necessary)			Docket Number (Optional) Legare-PAUS0004		Patent Number: TBD		
			Applicant: Joseph E. Legare				
			Issue Date:		Group Art Unit: 3748		
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	6,014,859	January 18, 2000	Yoshizaki et al.				
	5,600,948	February 11, 1997	Nakajima et al.				
	5,289,678	March 1, 1994	Grutter				
	5,355,671	October 18, 1994	Maus et al.				
	5,339,628	August 23, 1994	Maus et al.				
	5,435,172	July 25, 1995	Pelters et al.				
	5,497,617	March 12, 1996	Bagley et al.				
	5,630,315	May 20, 1997	Theis et al.				
	5,592,815	January 14, 1997	Jelden et al.				
	5,675,967	October 14, 1997	Reis-Mueller				
	5,732,549	March 31, 1998	Treinies et al.				
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
	Legare and Tamai, "High Temperature Measurements for On-Board Diagnostics of LEV/ULEV Systems", SAE Technical Paper Series, October 17, 1994.						
	Kato, Ikoma, and Nishikawa, "Exhaust Gas Temperature Sensor for OBD-II Catalyst Monitoring", SAE, pp. 129-135, 1996.						
	Eade, Hurley, Rutter, Inman and Bakshi, "Fast Light-Off of Underbody Catalyst Using Exhaust Gas Ignition (EGI)", SAE, pp.127-133, 1995.						
	Hepburn and Meitzler, "Calculating the Rate of Exothermic Energy Release for Catalytic Converter Efficiency Monitoring", SAE, pp. 189-206, 1995.						
EXAMINER				DATE CONSIDERED			

<b>37 CFR 1.501</b> <b>INFORMATION DISCLOSURE CITATION</b> <b>IN A PATENT</b> (Use several sheets if necessary)				Docket Number (Optional) Legare-PAUS0004		Patent Number: TBD	
				Applicant: Joseph E. Legare			
				Issue Date:		Group Art Unit: 3748	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	5,706,652	January 13, 1998	Sultan				
	5,896,743	April 27, 1999	Griffin				
	5,610,844	March 11, 1997	Maus et al.				
	5,845,492	December 8, 1992	Isobe et al.	60	284		
	5,661,971	September, 1997	Waschatz et al.	60	247		
	5,675,967	October 4, 1997	Reis-Mueller	60	274		
	5,715,676	February 10, 1998	Schnaiel et al.	60	274		
	6,148,808	November 21, 2000	Kainz	123	673		
	6,202,406	March 20, 2001	Griffin et al.	60	274		
<b>FOREIGN PATENT DOCUMENTS</b>							
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
	JP 04-308311	10/1992	Japan			YES	NO
	JP 09-088663	3/1997	Japan				
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
EXAMINER				DATE CONSIDERED			